UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

29399

7590

10/06/2010

JOHN S. BEULICK (12729) C/O ARMSTRONG TEASDALE LLP 7700 FORSYTH BOULEVARD SUITE 1800 ST. LOUIS, MO 63105 EXAMINER

WILLIAMS, MARK A

ART UNIT PAPER NUMBER

3673

DATE MAILED: 10/06/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563.602	02/01/2006	Reese Randolph Smith III	228277-3 (12729-847)	1904

TITLE OF INVENTION: LOCKING MECHANISMS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/06/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where m

appropriate. All further indicated unless correcte maintenance fee notifica	correspondence including ed below or directed other tions.	ng the Patent, advance of herwise in Block 1, by (orders and notification of (a) specifying a new corre	maintenance fees v spondence address	vill be ; and/or	mailed to the current of (b) indicating a separ	correspondence address as ate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
29399	7590 10/06	5/2010	nav				.••
JOHN S. BEUI C/O ARMSTRO 7700 FORSYTH	I h Sta adc trai	Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.					
SUITE 1800 ST. LOUIS, MO	63105		Г				(Depositor's name)
51. LOO15, WO	703103						(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	₹	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/563,602	02/01/2006	•	Reese Randolph Smith II	I	2282	77-3 (12729-847)	1904
TITLE OF INVENTION	: LOCKING MECHAN	ISMS					
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	01/06/2011
EXAM	IINER	ART UNIT	CLASS-SUBCLASS]			
WILLIAMS	S, MARK A	3673	292-216000				
CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON			(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
PLEASE NOTE: Unl recordation as set fort (A) NAME OF ASSIG	less an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assignee pletion of this form is NC	e data will appear on the p DT a substitute for filing an (B) RESIDENCE: (CIT	patent. If an assign assignment. Y and STATE OR C	COUNT	TRY)	
Please check the appropr	iate assignee category or	categories (will not be p	rinted on the patent):	Individual LC	orporati	on or other private grou	ip entity Government
4a. The following fee(s)	are submitted:	4	b. Payment of Fee(s): (Ple	ase first reapply a	ny prev	iously paid issue fee sl	hown above)
Issue Fee	Io amall antity discount s	normitted)	☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached.				
☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number				
5. Change in Entity Sta	tus (from status indicateds SMALL ENTITY state		☐ b. Applicant is no lor				
NOTE: The Issue Fee an	d Publication Fee (if rea	uired) will not be accepte	ed from anyone other than	-			·=· · ·
interest as shown by the	records of the United Sta	ites Patent and Trademar	k Office.				
Authorized Signature				Date			
				-			
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this bu 7irginia 22313-1450. DC	CFR 1.311. The informati JU.S.C. 122 and 37 CFR EUSPTO. Time will var- rden, should be sent to the ONOT SEND FEES OR	on is required to obtain or 1.14. This collection is es y depending upon the indi ne Chief Information Offic COMPLETED FORMS T	retain a benefit by t stimated to take 12 vidual case. Any co er, U.S. Patent and O THIS ADDRESS	he publ minutes omment Traden S. SENI	lic which is to file (and s to complete, including s on the amount of tim nark Office, U.S. Depan D TO: Commissioner fo	by the USPTO to process), gathering, preparing, and e you require to complete tment of Commerce, P.O. Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,602	10/563,602 02/01/2006 Reese Randolph Smith III		228277-3 (12729-847)	1904
29399 75	590 10/06/2010	EXAMINER		
JOHN S. BEULI	CK (12729)	WILLIAMS, MARK A		
	G TEASDALE LLP	ART UNIT	PAPER NUMBER	
7700 FORSYTH E SUITE 1800 ST. LOUIS, MO 6			3673 DATE MAILED: 10/06/201	0

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 428 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 428 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)		
	10/563,602	SMITH III, REESE RANDOLPH		
Notice of Allowability	Examiner	Art Unit		
	MARK A. WILLIAMS	3673		
The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not includ will be mailed in due	ed course. THIS	
1. This communication is responsive to 7/19/10.				
2. ☑ The allowed claim(s) is/are <u>1-10</u> .				
 3. Acknowledgment is made of a claim for foreign priority una) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 	been received. been received in Application No		tion from the	
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the re	quirements	
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			IOTICE OF	
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.			
(a) \square including changes required by the Notice of Draftspers	on's Patent Drawing Review (PTO-	948) attached		
1) hereto or 2) to Paper No./Mail Date				
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the C	office action of		
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in t			e back) of	
6. DEPOSIT OF and/or INFORMATION about the depo- attached Examiner's comment regarding REQUIREMENT			Note the	
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. ☐ Notice of Informal P. 6. ☐ Interview Summary Paper No./Mail Dat 7. ☑ Examiner's Amendn 8. ☐ Examiner's Stateme 9. ☐ Other	(PTO-413), e nent/Comment	owance	

Application/Control Number: 10/563,602 Page 2

Art Unit: 3673

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with William Zychlewicz on 9/2810.

The application has been amended as follows:

In claim 1, line 8, after "and second actuators", the word –each-- has been inserted.

In claim 1, line 11, after "a rotary actuator", the word "and" has been replaced with the phrase --for use in case of failure of the first actuator, the second actuator--.

In claim 1, line 12, after "parallel to the second axis and", the phrase —to the first axis, the cam— has been inserted.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK A. WILLIAMS whose telephone number is (571)272-7064. The examiner can normally be reached on Monday through Friday.

Application/Control Number: 10/563,602 Page 3

Art Unit: 3673

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Peter Cuomo can be reached on (571) 272-6856. The fax

phone number for the organization where this application or proceeding is assigned

is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR

only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system,

contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

would like assistance from a USPTO Customer Service Representative or access to

the automated information system, call 800-786-9199 (IN USA OR CANADA) or

571-272-1000.

/Mark A. Williams/

Examiner, Art Unit 3673

/Carlos Lugo/ Primary Examiner, Art Unit 3673